WHAT IS CLAIMED IS:

1. A method for preparing a compound of formula (1)

$$X$$
 CH_3
 (1)

wherein R, X, Y, and Z are organic substituents that do not interfere with the condensation of (2) and (3), comprising (a) condensing a compound of formula (2):

wherein R' is a carboxylic acid protecting group, with a compound of formula (3):

in the presence of an effective amount of $CaCl_2$, $N[(C_2-C_4)alkyl]_3$ and $[(C_1-C_4)alkyl]OH$ and microwave irradiation to yield a compound of formula (4):

$$R'O$$
 V
 Z
 CH_3
 (4) ;

and (b) optionally removing protecting R' to yield a compound of formula (1).

- 2. The method of claim 1 wherein Y is (C_1-C_4) alkyl.
- 3. The method of claim 2 wherein Y is methyl.
- 4. The method of claims 1, 2 or 3 wherein X and/or Z are H.
- 5. The method of claim 1 wherein $N[(C_2-C_4)alkyl]_3$ is NEt_3 .
- 6. The method of claim 5 wherein $[(C_1-C_4)alkyl]OH$ is EtOH.
- 7. The method of claims 1, 2, 3 or 4 wherein R' is 2-(trimethylsilyl)ethyl.
- 8. The method of claim 7 wherein R' is removed with TBAF.
- 9. The method of claims 1, 2 or 3 wherein R is C_3 - C_{22} alkyl optionally comprising 1-3 double bonds.
- 10. The method of claim 9 wherein R is a terpene.

11. The method of claims 1, 2 or 3 wherein X is H, further comprising irradiating the compound of formula 1, wherein R is -CH₂CH₂CH=C(CH₃)R², wherein R² is the remainder of organic group R, to yield a compound of formula (6):

$$R^2$$
 CH_3
 HO
 CH_3
 CH_3
 CH_3
 CH_3

- 12. The method of claim 11 wherein R² is -CH₂CH₂CH=C(Me)₂.
- 13. The method of claim 11 wherein Y is CH₃ and Z is H.
- 14. A method for preparing daurichromenic acid (1a), comprising (a) reacting 2-methyl-4,5-dihydroxybenzoic acid having a carboxy-protecting group with a compound of the formula (3a):

in the presence of an effective amount of CaCl₂-2H₂O, NEt₃ and microwave irradiation to yield a compound of the formula (4a):

wherein B is a carboxy-protecting group, and (b) removing B to yield daurichromenic acid.

15. The method of claim 14 wherein B is 2-TMS(ethyl) or (C₁-C₄)alkyl.

- 16. The method of claims 14 or 15 wherein daurichromenic acid (1a) is converted into rhododaurichromenic acid A (5a) and rhododaurichromenic acid B (6a) by irradiation.
- 17. The use of a compound of formula 1, 1a, 4, 4a, 5a, 6 or 6a to treat HIV infection or to treat AIDS in a mammal in need of such treatment, comprising administering an effective amount of said compound to said mammal.
- 18. A pharmaceutical composition comprising an effective amount of a compound of formula 1, 1a, 4, 4a, 5a, 6 or 6a in combination with a pharmaceutically-acceptable carrier or vehicle.
- 19. A dyestuff comprising an effective amount of a compound of formula 1, 1a, 4, 4a, 5a, 6 or 6a.
- 20. An antibacterial or herbicidal composition comprising an effective amount of a compound of formula 1, 1a, 4, 4a, 5a, 6 or 6a.